

ABSTRACT

A machine spindle includes a casing and a clamping mechanism disposed in the casing. The clamping mechanism includes front and rear drawbars which are relatively movable axially within the casing. A gas
5 spring biases the rear drawbar rearwardly, and a force transmitting mechanism transmits such rearward motion to the front drawbar for moving the front drawbar rearwardly. In response to its rearward movement, the front drawbar actuates a clamp for clamping a tool. The gas spring includes a housing disposed in the casing and defining a gas chamber having a front
10 wall through which the rear drawbar extends. The gas spring also includes a piston disposed in the gas chamber for axial movement therein. The piston is releasably connected to a rear end of the rear drawbar by a releasable coupling disposed in the chamber.